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| APPLICATION NO.                     | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------|-------------|-----------------------|---------------------|------------------|
| 10/603,563                          | 06/25/2003  | George D. Blankenship | LEEE 2 00197        | 5496             |
| 7590                                | 10/04/2005  |                       | EXAMINER            |                  |
| FAY, SHARPE, FAGAN, MINNICH & McKEE |             |                       | KIM, AHSHIK         |                  |
| Seventh Floor                       |             |                       | ART UNIT            | PAPER NUMBER     |
| 1100 Superior Avenue                |             |                       |                     | 2876             |
| Cleveland, OH 44114-2579            |             |                       |                     |                  |

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|                              |                        |                        |  |
|------------------------------|------------------------|------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>    |  |
|                              | 10/603,563             | BLANKENSHIP, GEORGE D. |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>        |  |
|                              | Ahshik Kim             | 2876                   |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 7/18/05 (Amendment).
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-40, 44, 47-65 and 73-76 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 40, 44, 47-65 and 73-76 is/are allowed.
- 6) Claim(s) 1, 2, 4, 9, 10, 21-25 and 30-39 is/are rejected.
- 7) Claim(s) 3, 5-8, 11-20 and 26-29 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/18/05
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### *Amendment*

1. Receipt is acknowledged of the amendment filed on July 18, 2005. In the amendment  
5 claims 41-43, 45, 46, and 66-72 were canceled, and claims 1, 47, 48, 60, and 61 were amended.  
Currently, claims 1-40, 44, 47-65, and 73-76 remain in the examination.

### *Terminal Disclaimer*

2. The terminal disclaimer filed on July 18, 2005 disclaiming the terminal portion of any  
10 patent granted on this application, which would extend beyond the expiration date of US Patent  
No. 6,708,877 to Blankenship et al. has been reviewed and is accepted. The terminal disclaimer  
has been recorded.

### *Claim Rejections - 35 USC § 103*

15 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

20 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in  
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are  
such that the subject matter as a whole would have been obvious at the time the invention was made to a person  
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the  
manner in which the invention was made.

25 4. Claim 1, 2, 4, 9, 10, 21-25, and 30-39 are rejected under 35 U.S.C. 103(a) as being  
unpatentable over Lanouette et al. (US 6,091,048, cited by Applicant, hereinafter “Lanouette”) in  
view of Kosaka et al. (US 5,630,955, hereinafter “Kosaka”)

Re claims 1, 21-25, and 30-39, Lanouette teaches a method and apparatus for welding/arc welding (see abstract; col. 1, lines 31+) wherein various operating parameters for a particular welding conditions may be set for the welding apparatus (col. 1, lines 31+). The sensors may include wire-sensor, a barcode reader, a proximity detector, a gas sensor and other sensors (col. 5 1, lines 65+). The barcode information contains wire material and diameter (col. 4, lines 24-33) which can be considered an area. The coded information can broadly interpreted as a program.

Lanouette fails to specifically teach or fairly suggest that the coded information is not imparted on the welding wire.

Kosaka teaches arc welding apparatus (see abstract) wherein the reference code P1 and 10 P2 are imparted on the welding wire (see figure 1; col. 3, lines 31-40).

In view of Kosaka's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to impart the coding means directly onto the welding wire as well as on the wire wheel. It is the Examiner's view that the code can be applied on the welding wire instead of the wheel, or that the code can be applied both on the wire wheel and the wire 15 itself. Placement of the code can certainly be considered a design variation element.

Functionally, reading the code controlling the welding apparatus in both embodiments is essentially the same function.

Re claims 2 and 4, barcode is a visual marker.

Re claims 9 and 10, a magnetic field also can be used as a data driving the apparatus to be 20 adjusted based on the magnetic information captured (co. 5, lines 57+). Although Lanouette is silent on tracking aspect of a product, once encoding is achieved, it is inherent that reading and

decoding of information can be performed in any desired locations (i.e., another manufacturing site, distribution site, etc.).

***Allowable Subject Matter***

5 5. Claims 40, 44, 47-65, 73-76 are allowed.

6. Claims 3, 5-8, 11-20, and 26-29, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the 10 claims are directed at methods and apparatus for encoding of metal welding wire with information pertaining and for controlling welding apparatus and process based on information extracted form the welding wire. As noted in continuation data, such matter is already disclosed in the parent applications, as the Applicant filed terminal disclaimer for. It is the Examiner's view that most independent claims and some dependent claims are broadly recited as indicated in 15 paragraphs 4. However, the cited references, taken alone or in combination, fail to show or fairly teach the specific method and apparatus for arc welding wherein coded information includes a magnetic code having a plurality of code segments or binary code, and the method for utilizing such information.

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***Response to Remarks***

8. Applicant's amended claims and remarks filed on July 18, 2005 have been carefully reviewed and considered. Citing of a new reference is responding Applicant's argument that the

presented claims recite "impart said coded information on to said welding wire....." As indicated in paragraph 4 above, such modification, in the Examiner's view, is obvious to one ordinary skill in the art. In view of the above, this Office Action is made *non-final*.

Examiner also carefully reviewed amended claims 40 and 60. Examiner reminds  
5 Applicant, for example, in claim 40, line 6 thereafter, "coded information including .....", The coded information must have every elements listed, not one of the listed items. Therefore, the code segment on the welding wire must have, at least in part, the form of a pulse count, a pulse width, a pulse frequency, a program, a binary value, a barcode, and a visual marker.

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### ***Conclusion***

I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Shimogama (US 6,278,082) discloses a welding apparatus. Applicant is respectfully suggested to carefully review these references.

15 II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (571)272-2393. The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday.

20 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571)272-2398. The fax number directly to the Examiner is (571)273-2393. The fax phone number for this Group is (703)872-9306.

25 Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

30 *All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

5 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available for Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions or access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10 Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

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Ahshik Kim  
Primary Examiner  
Art Unit 2876  
September 30, 2005